

Company, it was in fact reformulated locally from Prostin E₂ (dinoprostone vaginal suppository, 20 mg) and placed in a methylcellulose vehicle according to the method described by Gauger.⁴ Because the reformulation process results in dehydration and isomerization of PGE₂ to inactive metabolites, the interpretation of study results must be viewed critically. We suggest that the lack of demonstrable clinical benefit with the use of endocervical PGE₂ in this investigation is likely due to an unknown but reduced dosage of PGE₂ in the extemporaneous formulation.

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Dr Gilson Responds

TO THE EDITOR: We appreciate Dr Noah's interest in our article and were similarly struck by the unexpected results of our study. Nevertheless, as detailed in our metanalysis, other prospective studies have arrived at similar conclusions. We took great care that the reformulated dinoprostone we used was not altered during preparation or storage. At the time our study was carried out, Prepidil Gel (Upjohn) was not available for clinical use, and so the 20-mg vaginal suppository, Prostin E₂ (Upjohn) was used.

As noted in our article, the procedure we followed consisted of manipulating the suppository by slicing it into thin sections and allowing it to soften at room temperature for 15 minutes. The softened slices were then geometrically mixed with the contents of a 56-gram tube of sterile hydroxyethylcellulose gel, K-Y Jelly (Johnson & Johnson), to yield a homogenous mixture. Homogeneity was assured by adding a small drop of 1% methylene blue to each slice to serve as a marker. Individual doses of the mixture (0.5 mg per 1.42 ml of gel) were drawn up into plastic syringes and stored at -20°C for as long as 35 days unexposed to light. This product was removed from the freezer approximately an hour before use to allow thawing.^{1,2} In a related article, cocoa butter suppositories were also used as a vehicle for the dinoprostone.³ During the melting process in a 37°C water bath, temperatures of the molten mixture greater than 33°C resulted in aberrations in the bioactivity of the drug. We therefore avoided this vehicle and liquefaction technique.

We conclude that the short and gentle reformulation process we used is unlikely to have resulted in a loss of bioactivity or bioavailability of the active substance. It must be stressed, however, that we conducted no chemical stability tests on these extemporaneously compounded products. The current high cost of the new commercially

available gel may result in the continued clinical use of such extemporaneous formulations, and so Dr Noah's comments are well taken.

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More on the Crisis in Medical Education

TO THE EDITOR: I would like to make several comments regarding the editorial by Thomas Cesario, MD, in the August 1993 issue.

First I would like to commend Cesario's thinking through of the problem of increasing demands on physicians in academic centers and the effect that this has on medical student teaching. I do not, however, understand his conclusion that cost-effective medicine precludes "good clinical judgment, effective clinical decision making, and useful clinical algorithms." We must get away from the notion that every disease with similar symptoms has to be ruled out in every patient. The incidence of diseases seen in an academic center is not in any shape or form similar to that found in the community. Bayes's theorem is applicable. Not all tests are "good" tests. Common things are common. We must teach good, cost-effective medicine. "Good" and "cost-effective" can and should be two sides of the same coin.

My second observation is that Cesario's solutions of recruiting good community physicians to teach and rewarding them are certainly not novel. Family medicine has been doing this for years. In many medical schools family physicians from the community who like to teach are given academic appointments and receive stipends and other benefits for teaching medical students in their offices. Some receive no monetary reward but do it for the love and challenge of teaching and to repay society for some of the costs of their own medical education.

My point is not to toot the horn of family medicine but to say that those of us in the academic centers need to descend from the ivory towers of academe and learn from our colleagues in other specialties. It is expensive to keep reinventing the wheel. We should look to other specialties and copy and modify their educational strategies to fit our own specialties' needs. If internal medicine had done this years ago, that specialty would not need to try to maintain three sets of faculty—clinical, research, and instructional—in medical centers.

Because most patients are not treated in medical centers, it is necessary to use the whole community as the educational arena. Students learned this and demanded it long before academicians were willing to admit it. Let's do